



HUAWEI HG622 Home Gateway

User Guide



HUAWEI HG622 Home Gateway
V100R001

User Guide

Issue 02
Date 2010-06-25
Part Number 202193

Huawei Technologies Co., Ltd. provides customers with comprehensive technical support and service. Please feel free to contact our local office or company headquarters.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: <http://www.huawei.com>

Email: terminal@huawei.com

Copyright © Huawei Technologies Co., Ltd. 2010. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

The product described in this manual may include copyrighted software of Huawei Technologies Co., Ltd and possible licensors. Customers shall not in any manner reproduce, distribute, modify, decompile, disassemble, decrypt, extract, reverse engineer, lease, assign, or sublicense the said software, unless such restrictions are prohibited by applicable laws or such actions are approved by respective copyright holders under licenses.

Trademarks and Permissions



HUAWEI, HUAWEI, and



are trademarks or registered trademarks of Huawei Technologies Co., Ltd.

Other trademarks, product, service and company names mentioned are the property of their respective owners.

Notice

Some features of the product and its accessories described herein rely on the software installed, capacities and settings of local network, and may not be activated or may be limited by local network operators or network service providers. Thus the descriptions herein may not exactly match the product or its accessories you purchase.

Huawei Technologies Co., Ltd reserves the right to change or modify any information or specifications contained in this manual without prior notice or obligation.

NO WARRANTY

THE CONTENTS OF THIS MANUAL ARE PROVIDED "AS IS". EXCEPT AS REQUIRED BY APPLICABLE LAWS, NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE IN RELATION TO THE ACCURACY, RELIABILITY OR CONTENTS OF THIS MANUAL.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO CASE SHALL HUAWEI TECHNOLOGIES CO., LTD BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS, BUSINESS, REVENUE, DATA, GOODWILL OR ANTICIPATED SAVINGS.

Import and Export Regulations

Customers shall comply with all applicable export or import laws and regulations and will obtain all necessary governmental permits and licenses in order to export, re-export or import the product mentioned in this manual including the software and technical data therein.

Contents

1 Warnings and Precautions	1
2 Connecting the Cables and Powering On.....	4
2.1 Simple Connection	4
2.2 Connecting One Telephone	5
2.3 Connecting Multiple Telephones	6
2.4 Powering On	7
3 Setting the Internet Access Parameters.....	7
3.1 Configuring the HSPA uplink	7
3.2 Configuring the DSL uplink	8
4 Configuring the Wireless Network Connection.....	10
5 Basic Configuration	12
5.1 Changing the Administrator Password	12
5.2 Enabling or Disabling the Wireless Network Function	13
5.3 Changing the Wireless Network Name and the Access Password	13
5.4 Changing the Login IP Address	14
5.5 Downloading Files Through the USB Port.....	14
5.6 Restoring Default Settings.....	15
6 FAQs.....	15
7 Appendix.....	19
7.1 Indicators.....	19

7.2 Interfaces and Buttons.....	21
7.3 Default Settings.....	22
7.4 Technical Specifications.....	22

1 Warnings and Precautions

To use the device properly and safely, read these warnings and precautions carefully and strictly observe them during operation. Unless otherwise specified, the term "device" refers to the device and its accessories.

Basic Requirements

- During storage, transportation, and operation of the device, keep it dry and prevent it from colliding with other objects.
- Do not dismantle the device. In case of any fault, contact an authorized service center for assistance or repair.
- Without authorization, no organization or individual can change the mechanical, safety, or performance design of the device.
- When using the device, observe all applicable laws and regulations and respect the legal rights of other people.

Environmental Requirements for Using the Device

- Before connecting and disconnecting cables, stop using the device, and then disconnect it from the power supply. Ensure that your hands are dry during operation.
- Keep the device far from sources of heat and fire, such as a heater or a candle.
- Keep the device far from electronic appliances that generate strong magnetic or electric fields, such as a microwave oven or a refrigerator.
- Place the device on a stable surface.
- Place the device in a cool and well-ventilated indoor area. Do not expose the device to direct sunlight. Use the device in an area with a temperature ranging from 0°C to 40°C.
- Do not block the openings on the device with any object. Reserve a minimum space of 10 cm around the device for heat dissipation.
- Do not place any object (such as a candle or a water container) on the device. If any foreign object or liquid enters the device, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- During thunderstorms, power off the device, and then remove all the cables connected to it to prevent it from getting damaged due to lightning strikes.

Precautions for Using Wireless Devices

- When using the device, ensure that the antenna of the device is at least 20 cm away from all persons.
- Do not use the device where using wireless devices is prohibited or may cause interference or danger.
- The radio waves generated by the device may interfere with the operation of electronic medical devices. If you are using any electrical medical device, contact its manufacturer for the restrictions on the use of the device.
- Do not take the device into operating rooms, intensive care units (ICUs), or coronary care units (CCUs).

Areas with Inflammables and Explosives

- Do not use the device where inflammables or explosives are stored, for example, in a gas station, oil depot, or chemical plant. Otherwise, explosions or fires may occur. In addition, follow the instructions indicated in text or symbols.
- Do not store or transport the device in the same box as inflammable liquids, gases, or explosives.

Accessory Requirements

- Use only the accessories supplied or authorized by the device manufacturer. Otherwise, the performance of the device may get affected, the warranty for the device or the laws and regulations related to telecommunications terminals may become null and void, or an injury may occur.
- Do not use the power adapter if its cable is damaged. Otherwise, electric shocks or fires may occur.
- Ensure that the power adapter meets the specifications indicated on the device nameplate.
- Ensure that the power adapter meets the requirements of Clause 2.5 in IEC60950-1/EN60950-1 and it is tested and approved according to national or local standards.

Safety of Children

Keep the device and its accessories out of the reach of children. Otherwise, they may damage the device and its accessories by mistake, or they may swallow the small components of the device, causing suffocation or other dangerous situations.

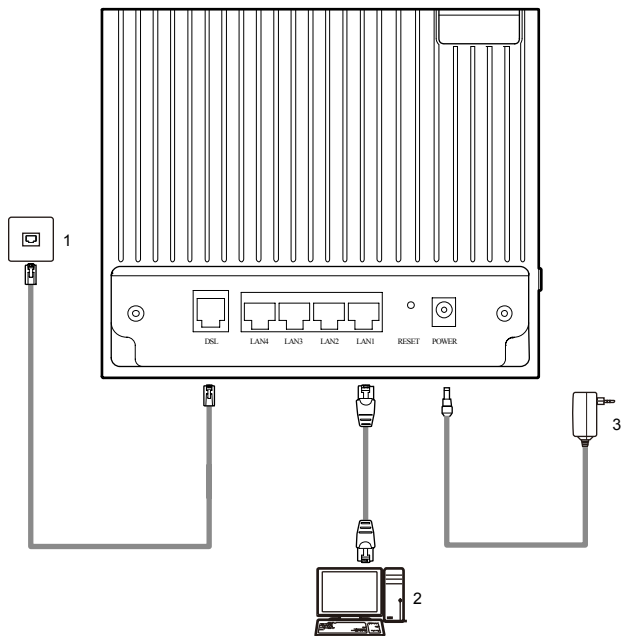
Maintenance

- If the device is not used for a long time, power it off, and then remove all the cables connected to it.
- If any exception occurs, for example, if the device emits any smoke or unusual sound or smell, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- Do not trample, pull, or overbend any cable. Otherwise, the cable may get damaged, causing malfunction of the device.
- Before cleaning the device, stop using it, power it off, and then remove all the cables connected to it.
- Use a clean, soft, and dry cloth to clean the device shell. Do not use any cleaning agent or spray to clean the device shell.

2 Connecting the Cables and Powering On

2.1 Simple Connection

If your telephone line is used for the broadband network access only and if you do not need to use a telephone, take the following figure as a reference for connecting the cables.



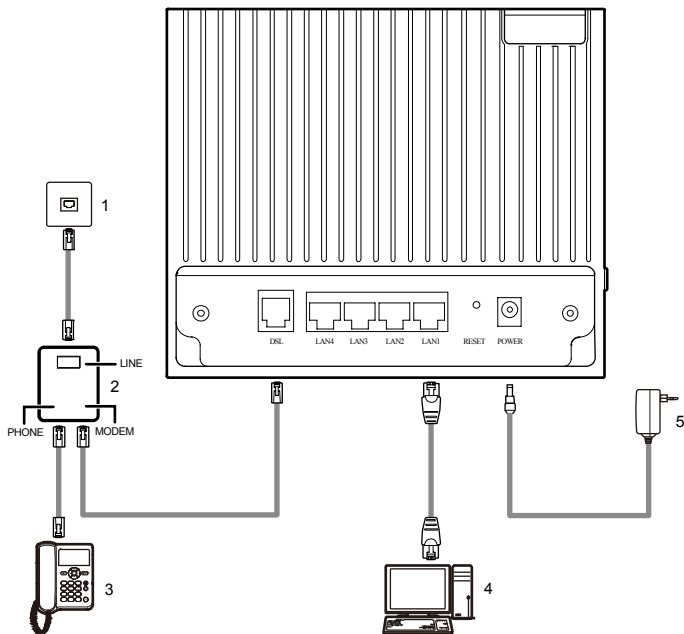
1. Telephone jack on the wall 2. Computer 3. Power adapter



If the wireless network function is used on the HG622 for the network access, you do not need to connect the cables.

2.2 Connecting One Telephone

If your telephone line is used for both the broadband network access and a telephone connection, take the following figure as a reference for connecting the cables.



1. Telephone jack on the wall

2. Splitter

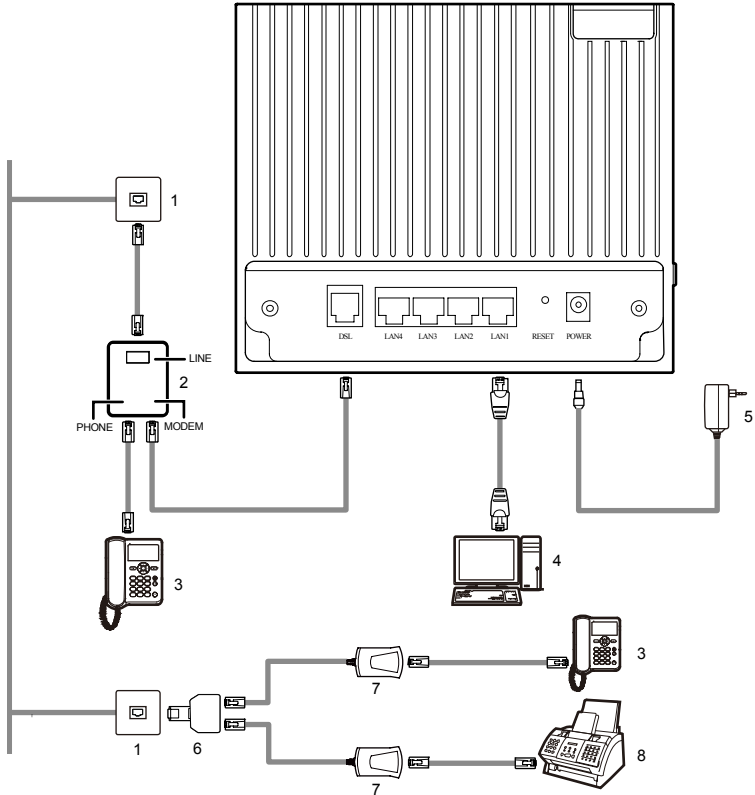
3. Telephone

4. Computer

5. Power adapter

2.3 Connecting Multiple Telephones

If your telephone line is used for the broadband network access, telephone connections, and fax connections, take the following figure as a reference for connecting the cables.



1. Telephone jack on the wall

2. Splitter

3. Telephone

4. Computer

5. Power adapter

6. T connector

7. Microfilter

8. Fax machine

2.4 Powering On

To power on the HG622, press the ON/OFF button on the side panel of the HG622.

After you power on the HG622, the DSL indicator blinks (for less than three minutes), which indicates that the HG622 is being activated. Later, the DSL indicator turns solid on. The POWER indicator is also solid on, which indicates that the HG622 is working properly.

3 Setting the Internet Access Parameters

The HG622 supports VDSL2 uplink and High-Speed Packet Access (HSPA) uplink through Huawei HSPA data card. Realizes dynamic mutual backup of voice and data services through the DSL link and HSPA link.

3.1 Configuring the HSPA uplink

When the HG622 is working through the Huawei HSPA data card, you need to install the Huawei HSPA data card on the HG622 so that your PC can connect to the Internet through HSPA uplink. To create a HSPA uplink connection, do as follows:

Step 1 Log in to the Web-based configuration utility.

1. Launch the Internet Explorer on your computer. Enter **http://192.168.1.1** in the address bar, and then press **Enter**.
2. In the displayed dialog box, enter the user name and the password, and then click **Login**.

By default, both the user name and the password are **admin**. After the user name and the password are verified, you can access the Web-based configuration utility.

Step 2 Click **Basic > WAN** in the navigation tree to display the **WAN Connection Page**.

Step 3 Click the connection whose access type is UMTS.

Step 4 Select **Enable** for **WAN connection**.

Step 5 Enter the APN and the Dial number that are provided by the network operator in the **APN** text box and the **Dial number** text box.

Step 6 Enter the user name and password in the **User name** and **Password** text boxes that you can configure.

Step 7 Click the **Submit** button to finish the UMTS settings.

If you want to verify the PIN code of your SIM card, then do as follows:

Step 1 Click **Advanced** > **PIN** in the navigation tree to display the **PIN** Page.

Step 2 Enter the original PIN number in the **PIN** text box.

Step 3 Click the **Submit** button to finish the settings on the **PIN** Page.



Use the default values for the other parameters. In general, they do not need to be configured.

3.2 Configuring the DSL uplink

By configuring the HG622 and your computer, you can choose any of the following methods to surf the Internet:

- Using the Embedded PPP Dial-Up Software on the HG622
- Using the PPP Dial-Up Software on Your Computer

Using the Embedded PPP Dial-Up Software on the HG622

If you select this method for accessing the network, the HG622 starts to set up a dial-up connection automatically after the startup. You can access the network after you power on your computer. You do not need to install any special dial-up software on your computer or perform dial-up operations on your computer. To configure the HG622 and your computer for the network access, do as follows:

Step 1 Log in to the Web-based configuration utility of the HG622.

Step 2 Configure the ATM PVC.

1. In the navigation tree, choose **Basic** > **ATM**.
2. Enter **VPI/VCI** provided by the Internet Service Provider (ISP).
3. Select **EoA** from the **DSL link type** option button.
4. Click **Submit**.

Step 3 Set WAN parameters.

1. In the navigation tree, choose **Basic** > **WAN**.
2. Select a PVC from the **Layer2 interface** drop-down combo box.



- The name of this PVC should begin with **atm**.
- The DSL link type of this ATM PVC should be **EoA**.

3. Select **Enable** for WAN connection.
4. Select a service from the **Service list** drop-down list box.
5. Select a LAN interface from the **Port binding** check box.
6. Select **Route** from the **Connection mode** drop-down list box.
7. Select **PPPoE** from the **Connection type** option button.
8. Enter the **User name** and **Password** provided by the ISP.
9. Click **Submit**.

Step 4 Set LAN parameters.

1. In the navigation tree, choose **Basic > LAN**.
2. Set the **IP address** and **Subnet mask** of the LAN connection.
3. Select **Enable** for **DHCP server**, and then set the corresponding parameters.
4. Click **Submit**.

After you complete the preceding settings, you can surf the Internet.

You need to perform the preceding operations on a computer once only. The next time when you power on your computer, you can surf the Internet without any configuration.

Using the PPP Dial-Up Software on Your Computer

If you select this method for accessing the network, you need to install and configure the dial-up software on your computer. In addition, you need to perform dial-up operations on your computer upon each startup. To configure the HG622 and your computer for the network access, do as follows:

Step 1 Set the working mode of the HG622 to **Bridge**.

For details, refer to the procedure for enabling the embedded dial-up function described in Step 3 in section "Using the Embedded PPP Dial-Up Software on the HG622." Note that **Bridge** is selected from the **Connection mode** drop-down list box.

Step 2 Install and configure the PPP dial-up software on your computer.

The PPP dial-up software is pre-installed on certain computer operating systems. To create a dial-up connection, do as follows (taking the Windows XP operating system as an example):

1. Choose **Start > All Programs > Accessories > Communications > Network Connections**.
2. Click **Create a new connection** in **Network Tasks** to display the **New Connection Wizard** window, and then click **Next**.
3. Select **Connect to the Internet**, and then click **Next**.
4. Select **Set up my connection manually**, and then click **Next**.
5. Select **Connect using a broadband connection that requires a user name and password**, and then click **Next**.
6. Enter the name (as desired) of the dial-up connection in **ISP Name**, and then click **Next**.
7. Select **Anyone's use** or **My use only**, and then click **Next**.
8. Enter the user name and password provided by the network operator and used for the dial-up connection, and then click **Next**.
9. Select **Add a shortcut to this connection to my desktop**, and then click **Finish**.

An icon for the dial-up connection is displayed on the desktop of your computer.

You need to perform the preceding operations only once for creating a network connection. After the network connection is created, to access the network, double-click the icon for the dial-up connection, and then click **Connect** in the displayed dialog box.

4 Configuring the Wireless Network Connection

If a wireless network adapter is installed on your computer, you can connect your computer to the HG622 through a wireless connection.



The hardware installation methods and driver installation methods of wireless network adapters provided by different companies vary from each other. For details, see the installation guide provided by the wireless network adapter provider.

Setting Up a Wireless Connection Through the WPS Button

The HG622 supports the Wi-Fi Protected Setup (WPS) function. If your network adapter also supports the WPS function, you can use the WPS function to set up a wireless connection between your PC and the HG622 quickly. To set up a wireless connection, do as follows:

- Step 1** Enable the wireless network function, and set the wireless network name and access password of the HG622, do as follows (taking the authentication type WPA-PSK as an example):
1. Log in to the Web-based configuration utility of the HG622.
 2. In the navigation tree on the left of the Web-based configuration utility, choose **Basic > WLAN**.
 3. Select the **Enable WLAN** option.
 4. Enter a wireless network name in the **SSID** text box.
 5. Select **WPA-PSK** from the **Security** drop-down combo box.
 6. Enter an access password in the **WPA pre-shared key** text box.
 7. Select **AES** from the **WPA encryption** drop-down combo box.
 8. Click **Submit** to save the settings.
- Step 2** Press the WPS button of the HG622 to enable the HG622 to enter the WPS negotiation state.
- Step 3** Enable the WPS negotiation function of the wireless network adapter on your PC within two minutes, and then wait for a moment (typically 10s and at most 120s).

The WPS indicator of the HG622 becomes on from the blinking state, indicating that the HG622 is connected to your PC through the WLAN. This state lasts 300s. Then the WPS indicator turns off.



If the WPS indicator does not blink, it indicates that the WPS function cannot be enabled. Note that the WPS function can be used only when the wireless network function is enabled and the wireless network security mode of the WLAN is set to WPA-PSK or WPA2-PSK.

Setting Up a Wireless Connection Manually

If your network adapter does not support the WPS function, you can set up a wireless connection between your PC and the HG622 manually. To manually set up a wireless connection, use either of the following methods:

- Use the tool provided by your network adapter.

For details, see the user guide of your network adapter.

- Use the wireless configuration software provided by the operating system of your PC.

This section takes Windows XP as an example and describes how to set up a wireless connection between your PC and the HG622 manually, do as follows:

Step 1 Enable the wireless network function, and set the wireless network name and access password of the HG622.

1. Log in to the Web-based configuration utility.
2. In the navigation tree on the left of the Web-based configuration utility, choose **Basic > WLAN**.
3. Select the **Enable WLAN** option.
4. Enter a wireless network name in the **SSID** text box.
5. Select **WPA-PSK** from the **Security** drop-down combo box.
6. Enter an access password in the **WPA pre-shared key** text box.
7. Select **AES** from the **WPA encryption** drop-down combo box.
8. Click **Submit** to save the settings.

Step 2 Enable the wireless configuration service provided by Windows XP.

1. Right-click **My Computer**, and then choose **Manage** from the shortcut menu.
2. In the **Computer Management** window, choose **Computer Management (Local) > Services and Applications > Services**.
3. From the services listed in the right pane of the **Computer Management** window, right-click **Wireless Zero Configuration**, and then choose **Properties** from the shortcut menu.
4. In the **Wireless Zero Configuration Properties (Local Computer)** dialog box, check whether **Service status** is **Started**. If not, click **Start**.

5. Click **OK** to close the dialog box, and then close the **Computer Management** window.

Step 3 Configure the wireless network connection on your computer.

1. Choose **Start > All Programs > Accessories > Communications > Network Connections**.
2. In the **Network Connections** window, right-click **Wireless Network Connection** to display a shortcut menu, and then select **View Available Wireless Networks** from the shortcut menu.
3. In the **Wireless Network Connection Properties** dialog box, select **Wireless Networks**.
4. Select **Use Windows to configure my wireless network settings**.
5. Click **View Wireless Networks**.
6. In the **Wireless Network Connection** dialog box, select the WLAN with the same name that is configured in Step 1, and then click **Connect** in the lower right corner of the window.
7. In the displayed dialog box, enter the access password that is preset in Step 1, and then click **Connect**.

After the password is authenticated, **Connected** is displayed in the upper right corner of the WLAN icon in the WLAN list, indicating that a wireless connection is set up between you PC and the HG622.

8. Close the **Wireless Network Connection** dialog box.
9. In the **Wireless Network Connection Properties** dialog box, click **OK**.

5 Basic Configuration

5.1 Changing the Administrator Password

For safety reasons or to make the password easy to remember, you can change the administrator password for login after logging in to the Web-based configuration utility.

To change the password, do as follows:

- Step 1** Log in to the Web-based configuration utility.
- Step 2** Choose **Maintenance > Account** in the navigation tree to display the system management page.
- Step 3** Select **admin** from the **User name** drop-down combo box.
- Step 4** Enter the **Current password** and the **New password**. Then enter the new password again in the **Confirm password** text box for confirmation.

Step 5 Click **Submit** to save the settings.

After you change the password successfully, the current page jumps to the page for logging in to the Web-based configuration utility. To log in to the Web-based configuration utility, enter the new password, and then click **Submit**.



If you forget the user name or password that has been changed, you can restore the default settings of the HG622 by pressing and holding the RESET button for over six seconds. Then, the user name and password that are used for logging in to the Web-based configuration utility are restored to default values. After you restore the default settings, however, your customized data is lost. Therefore, use this function with caution.

5.2 Enabling or Disabling the Wireless Network Function

You can quickly enable or disable the wireless network function by pressing the WLAN button on the HG622. To enable the wireless network function, press and hold the WLAN button for over one second, and then release the button. You can disable the wireless network function in the same way. The WLAN indicator shows whether the wireless network function is enabled.

In addition, you can enable or disable the wireless network function through the Web-based configuration utility. To enable or disable the wireless network function, do as follows:

- Step 1** Log in to the Web-based configuration utility.
- Step 2** In the navigation tree on the left, choose **Basic > WLAN**.
- Step 3** Select or not select the **Enable WLAN** option.
- Step 4** Click **Submit** to save the settings.

5.3 Changing the Wireless Network Name and the Access Password

To change the name and access password for the wireless network, do as follows (taking the authentication type WPA-PSK as an example):

- Step 1** Log in to the Web-based configuration utility.
- Step 2** In the navigation tree on the left, choose **Basic > WLAN**.
- Step 3** Enter the new wireless network name in the **SSID** text box.
- Step 4** Select **WPA-PSK** from the **Security** drop-down combo box.

- Step 5** Enter the new access password in the **WPA pre-shared key** text box.
- Step 6** Select **AES** from the **WPA encryption** drop-down combo box.
- Step 7** Click **Submit** to save the settings.

5.4 Changing the Login IP Address

To make the login IP address easy to remember, you can change the IP address after logging in to the Web-based configuration utility.

To change the IP address, do as follows:

- Step 1** Choose **Basic > LAN** in the navigation tree.
- Step 2** Select the **DHCP** page.
- Step 3** Enter a new IP address as desired in the **IP address** text box. Then, enter a subnet mask in **Subnet mask**.
- Step 4** Click **Submit** to save the settings.



To log in to the Web-based configuration utility after you change the IP address successfully, you need to launch the Internet Explorer, and then enter the new IP address in the address bar. Ensure that the IP address of the computer is in the same network segment as that of the HG622 so that the computer can access the Web-based configuration utility.

5.5 Downloading Files Through the USB Port

After a portable storage device is connected to the USB port on the rear panel of the HG622, you can configure the HG622 as a File Transfer Protocol (FTP) client. Through the HG622, the files on the FTP server can be downloaded to the removable storage device.

To download files through the HG622, do as follows:

- Step 1** Choose **Advanced > USB Port**.
- Step 2** In the **User name** and **Password** text boxes, enter the user name and the password.
- Step 3** In **Download URL** and **Port** text boxes, enter the Uniform Resource Locator (URL) address and port used for downloading files from the FTP server.
- Step 4** Click the **Device** drop-down list box, and then select the storage device partition used for saving downloaded files.
- Step 5** In the **Local path** text box, enter the path used for saving downloaded files.
- Step 6** Click **Download**.



After files are downloaded, you can view file downloading records on the **Download History** tab.

5.6 Restoring Default Settings

You can quickly restore the default settings of the HG622 by pressing the RESET button on the rear panel. To restore the default settings, press and hold the RESET button for over six seconds after the HG622 is powered on, and then release the button. In addition, you can restore the default settings of the HG622 through the Web-based configuration utility. To restore the default settings through the Web-based configuration utility, do as follows:

- Step 1** Log in to the Web-based configuration utility, and then choose **Maintenance > Device** in the navigation tree to display the reboot page.
- Step 2** Click **Restore Default Settings**.

After the preceding operations, the current page jumps to the login page. You can log in to the Web-based configuration utility by entering the default user name and password that are **admin**.

6 FAQs

How can I quickly enable or disable the wireless network function?

Press and hold the WLAN button for over one second, and then release the button to enable or disable the wireless network function. The WLAN indicator shows whether the wireless network function is enabled.

How can I quickly restore the default settings of the terminal?

To restore the default settings, press and hold the RESET button on the rear panel for over six seconds after the HG622 is powered on, and then release the button.

What can I do if I cannot access the Internet through the terminal?

Step 1 Check whether the POWER indicator on the terminal is solid on.

If the POWER indicator is off, perform further checks as follows:

1. Ensure that the terminal is turned on.
2. Ensure that electricity comes from the socket and that the power input from the socket meets the requirements described on the label of the terminal power adapter. If the voltage is unsteady, for example, if the voltage is too high or too low, do not use the terminal. Wait until the voltage restores to its normal level, and then use the terminal.

3. Ensure that the terminal is properly connected to the socket through the power adapter.

If the POWER indicator is still off, contact an authorized maintenance center.

- Step 2** After powering on the terminal, wait for about three minutes. Then, check whether the DSL indicator on the terminal is solid on.

If the DSL indicator blinks for a long time, perform further checks as follows:

1. Ensure that telephone lines are properly connected. Pay special attention to the connections between the telephone lines and the splitter.
2. Ensure that the terminal or telephone lines are far from the electric appliances that generate strong magnetic or electric fields. Replace telephone lines when necessary.

If the DSL indicator still blinks and does not turn solid on, contact your network operator.

- Step 3** Check whether the LAN indicator of the terminal is on.

If the LAN indicator is off, perform further checks as follows:

1. Ensure that the network adapter of the computer is enabled.
2. Ensure that the network cable between the terminal and the computer is properly connected. Remove and then insert the network cable or replace the network cable when necessary.

If the LAN indicator is still off, contact an authorized maintenance center.

- Step 4** Check whether the driver for the network adapter is properly installed. Take a computer that runs Windows XP as an example. To check whether the driver for the network adapter is installed, do as follows:

1. On the desktop, right-click **My Computer**, and then choose **Manage**.
2. In the navigation tree of the **Computer Management** window, choose **Device Manager**.
3. In the right pane of the **Computer Management** window, click **Network adapters** to view the information about the network adapter of the computer.

If no network adapter is found or if a question mark (?) or an exclamation mark (!) is displayed next to the icon of the network adapter, you can infer that the driver for the network adapter is not properly installed. In this case, re-install the driver for the network adapter of the computer.

- Step 5** Ensure that you have entered the correct user name and user password that are required by the PPP dial-up software.

The user name and the user password are provided by your network

operator.

Step 6 Check whether you can use the PPP dial-up software to dial successfully.

If you cannot use the PPP dial-up software to dial successfully, perform further checks as follows:

1. Stop the PPP dial-up software and then power off the terminal. After five minutes, power on the terminal, and then use the PPP dial-up software to dial again.
2. Restore the default settings of the terminal.

If the problem persists, contact your network operator.

Step 7 Check whether the proxy server of the Web browser is correctly configured. Take the Internet Explorer installed on a computer that runs Windows XP as an example. To check whether the proxy server of the Web browser is correctly configured, do as follows:

1. Launch the Internet Explorer.
2. Choose **Tools > Internet Options**.
3. In the **Internet Options** dialog box, click the **Connections** tab.
4. In the **Local Area Network (LAN) settings** group box, click **LAN Settings**.
5. In the **Proxy server** group box of the **Local Area Network (LAN) Settings** dialog box, ensure that the **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)**, check box is cleared.

Step 8 Try to access multiple Web sites to check whether the terminal can access these Web sites.

If the terminal still cannot access Web sites, contact your network service provider.

What can I do if Web pages often cannot be displayed during Web page browsing and can be displayed after the terminal is restarted?

Step 1 Ensure that the terminal and other devices, such as telephones or fax machines, are connected to telephone lines through a splitter.

For details about how to install a splitter, see the related description in the manual.

Step 2 Ensure that telephone lines are properly connected.

If the telephone lines are improperly connected, the stability of the network connection is affected.

Step 3 Check the positions of your terminal and your computer. Ensure that they are far from electric appliances, such as microwave ovens, refrigerators, or cordless telephones, that generate strong magnetic or electric fields.

If the problem persists, contact your service provider.

What can I do if sometimes the terminal cannot access the Internet through a WLAN connection or if the WLAN connection is unsteady?

Step 1 Check the positions of your terminal and your computer. Ensure that they are far from the electric appliances, such as microwave ovens, refrigerators, or cordless telephones, that generate strong magnetic or electric fields.

Step 2 Place your terminal in an open area.

Although radio signals can pass through obstacles, the transmission effects of WLAN radio signals are affected if radio signals pass through too many obstacles, such as cement or wooden walls.

Step 3 Place your computer close to your terminal.

If your computer is far from your terminal, the effects of the WLAN are affected.

Step 4 Place your terminal and computer in another direction.

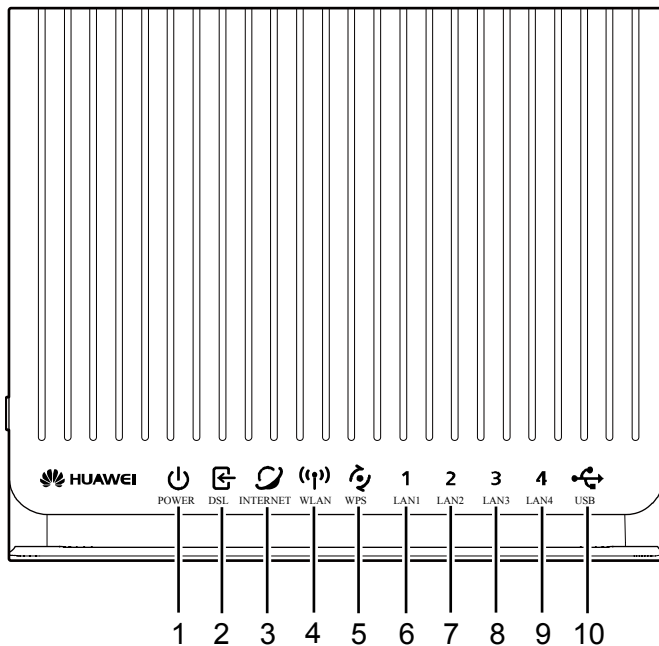
Step 5 Do not use your terminal to access the WLAN during thunderstorms.

After a broadband terminal is installed, does Internet access degrade call quality or do telephone calls lower the Internet access rate?

No. The terminal uses the frequency division multiplexing (FDM) and splitter technologies to separate voice signals from data signals. Although the two types of signals are transmitted through one telephone line, they are carried by different frequency bands. Therefore, they do not interfere with each other. In this case, you can make a telephone call and access the Internet simultaneously, without degrading call quality or lowering the Internet access rate.

7 Appendix

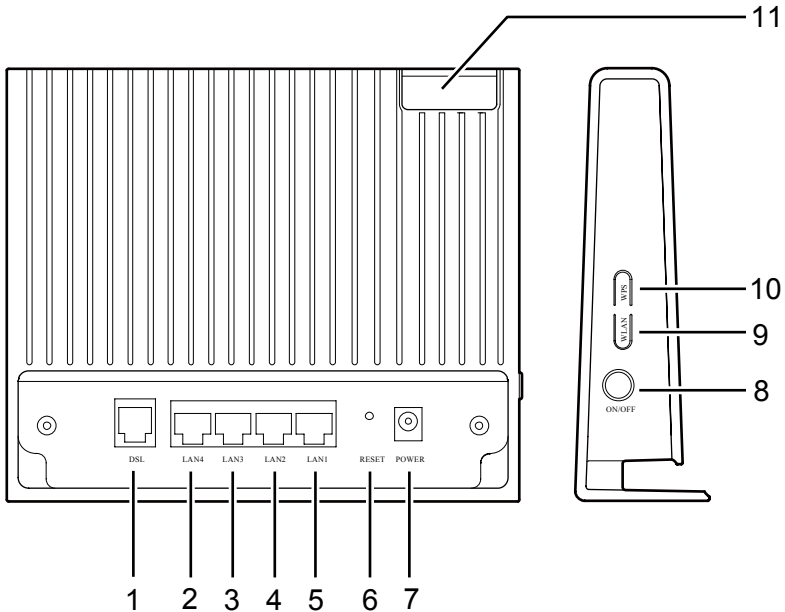
7.1 Indicators



No.	Indicator	Status	Description
1	POWER	On	The HG622 is powered on.
		Off	The HG622 is powered off.
2	DSL	On	The HG622 is activated.
		Blinking	The HG622 is being activated.
		Off	The HG622 is powered off.

No.	Indicator	Status	Description
3	INTERNET	On	<ul style="list-style-type: none"> The HG622 works in routing mode. The WAN connection is set up. No data is being transmitted.
		Blinking	<ul style="list-style-type: none"> The HG622 works in routing mode. The WAN connection is set up. Data is being transmitted.
		Off	<ul style="list-style-type: none"> The HG622 works in bridge mode or in routing mode. No WAN connection is set up.
4	WLAN	On	<ul style="list-style-type: none"> The wireless network function is enabled. No data is being transmitted through the WLAN.
		Blinking	<ul style="list-style-type: none"> The wireless network function is enabled. Data is being transmitted through the WLAN.
		Off	The wireless network function is disabled.
5	WPS	On	<p>A wireless connection is set up between the HG622 and a wireless client through the WPS function.</p> <p>This state lasts 300s.</p>
		Blinking	<p>The HG622 is attempting to set up a wireless connection with a wireless client (such as a PC on which a wireless network adapter is installed) through the WPS function.</p> <p>This state lasts no more than 120s.</p>
		Off	The WPS function is disabled.
6–9	LAN1–LAN4	On	The Ethernet connection is set up.
		Blinking	Data is being transmitted through the Ethernet interface.
		Off	The Ethernet connection is not set up.
10	USB	On	The USB connection is set up.
		Blinking	Data is being transmitted through the USB port.
		Off	The USB connection is not set up.

7.2 Interfaces and Buttons



No.	Interface or Button	Description
1	DSL	Used to connect HG622 to the MODEM interface on the splitter or to the telephone jack on the wall.
2-5	LAN1–LAN4	Used to connect Ethernet devices, such as PCs and switches.
6	RESET	Used to restore the factory settings. Power on the HG622, press and hold the RESET button for at least 6 seconds, and then release the button. Note After you restore the default settings, your customized data is lost. Therefore, use this function with caution.
7	POWER	Used to connect the power adapter.
8	ON/OFF	Used to power on or power off the HG622.

No.	Interface or Button	Description
9	WLAN	Used to enable or disable wireless network function quickly.
10	WPS	Used to set up a wireless connection between the HG622 and a wireless terminal easily and safely.
11	USB	Used to connect a USB device, such as a Huawei HSPA data card.

7.3 Default Settings

Parameter	Setting
IP address of the LAN interface	192.168.1.1
Subnet mask of the LAN interface	255.255.255.0
User name used for logging in to the Web-based configuration utility	admin
Password used for logging in to the Web-based configuration utility	admin
DHCP server function	Enable
Wireless network function	Enable

7.4 Technical Specifications

Item	Specification
Power supply	12 V DC, 1.5 A
Power consumption	< 18 W
Ambient temperature for operation	0°C to 40°C (32°F to 104°F)
Relative humidity for operation	5% to 95%, non-condensing
Dimensions (L × W × H)	173 mm × 48 mm × 146.5 mm

Item	Specification	
Weight	About 350 g	
Standards	VDSL2 standards	G.993.2 Annex B PSD Mask ITU G.994.1 (G.hs)
	ADSL2+ standard	ITU G.992.5 (G.dmt.bitplus) Annex A
	ADSL2 standards	ITU G.992.3 (G.dmt.bis) Annex A ITU G.992.3 (G.dmt.bis) Annex L
	ADSL standards	ITU G.992.1 (G.dmt) Annex A ITU G.994.1 (G.lite) ANSI T1.413 Issue 2
	WLAN standard	802.11b, 802.11g and 802.11n(2.4 GHz)
Wireless transmission rates	802.11b	1 Mbit/s, 2 Mbit/s, 5.5 Mbit/s, 11 Mbit/s
	802.11g	6 Mbit/s, 9 Mbit/s, 12 Mbit/s, 18 Mbit/s, 24 Mbit/s, 36 Mbit/s, 48 Mbit/s, 54 Mbit/s
	802.11n	6.5 Mbit/s, 13 Mbit/s, 13.5 Mbit/s, 19.5 Mbit/s, 26 Mbit/s, 27Mbit/s, 39 Mbit/s, 40.5 Mbit/s, 52 Mbit/s, 54 Mbit/s, 58.5 Mbit/s, 65 Mbit/s, 78 Mbit/s, 81 Mbps, 104 Mbit/s, 108 Mbit/s, 117 Mbit/s, 121.5 Mbit/s, 130 Mbit/s, 135 Mbit/s, 162 Mbit/s, 216 Mbit/s, 243 Mbit/s, 270 Mbit/s, 300 Mbit/s

HUAWEI TECHNOLOGIES CO., LTD.

Huawei Industrial Base

Bantian, Longgang

Shenzhen 518129

People's Republic of China

www.huawei.com

Part Number: 202193